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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,540	03/01/2002	Steven J. Yockey	10541-1072	2249

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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 10/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/087,540

Applicant(s)

YOCKEY ET AL.

Examiner

Nguyen N Hanh

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10 is/are rejected.
- 7) ☐ Claim(s) 6-9 and 11-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (26) in Page 5, line 17. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

2. Claims 1 and 11 are objected to because of the following informalities: "around said alternator" in line 6 of claim 1 and line 14 of claim 11 should be written as ---around said inner housing of said alternator". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kitamura et al.

Regarding claim 1, Kitamura et al. disclose an alternator comprising: an inner housing (comprising 23, 24 and 28 in Fig. 4) , and an outer housing (comprising 26, 28 and 31) mounted over said inner housing, said inner housing and said outer housing defining a flow chamber including a disk shaped first plenum (between rear bracket 24

and cylinder block 31) extending diametrically across said alternator, an axial jacket extending annularly around said alternator (27), and a disk shaped second plenum (29) extending diametrically across said alternator.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. in view of Ragaly.

Regarding claim 2, Kitamura et al. disclose an alternator wherein said first plenum is a disk shaped cavity extending diametrically across said alternator adjacent a rear end of said alternator, said axial jacket is defined by an inner diameter of said outer housing and an outer diameter of said inner housing, such that said axial jacket forms an annular jacket extending substantially around said alternator, and said second plenum is defined by a second disk shaped portion of said inner housing and a disk shaped front portion of said outer housing, such that said second plenum is a disk shaped cavity extending diametrically across said alternator adjacent a front end of said alternator. The structure disclosed by Kitamura et al. fails to show an alternator wherein said first plenum is defined by opposing first and second disk shaped portions of said inner housing.

However, Ragaly discloses an alternator wherein the first plenum is defined by opposing first and second disk shaped portions of the housing of the alternator for the purpose of forming a cooling chamber.

Since Kitamura et al. and Ragaly are in the same field of endeavor, the purpose disclosed by Ragaly would have been recognized in the pertinent art of Kitamura et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Kitamura et al. by making the recess portion (35) of the cylinder block (31) integral with the inner housing to form the first and second disk shaped portions as taught by Ragaly for the purpose of forming a cooling chamber.

Regarding claim 3, Kitamura et al. also disclose an alternator wherein said axial jacket (27 in Fig. 1-4) is disposed between and interconnects said first plenum and said second plenum, said first plenum, said axial jacket, and said second plenum being in fluid communication with one another.

Regarding claim 4, Ragaly also discloses an alternator wherein further including an inlet (40) extending from said first plenum adapted to allow coolant to enter said first plenum, and an outlet (41 in Fig. 1) extending from said second plenum and adapted to allow coolant to exit said flow chamber.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Kitamura et al. by forming an outlet extending from said second plenum and adapted to allow coolant to exit said flow chamber as taught by Ragaly for the purpose of forming a cooling chamber.

Regarding claim 5, Kitamura et al. also disclose an alternator wherein said inlet and said outlet are adapted to connect to a coolant system of an automobile such that engine coolant is circulated through said alternator (Abstract).

Regarding claim 10, Ragaly also discloses an alternator comprising a shaft (15) rotatably supported within said inner housing by a pair of bearing elements (19 and 20), having a pulley (16) mounted to a first end and a pair of slip rings (21) mounted to a second end, a rotor assembly including first and second pole pieces mounted onto said shaft with an excitation winding mounted between said first and second pole pieces, a stator assembly fixedly mounted within said inner housing in functional engagement with said rotor assembly.

***Allowable Subject Matter***

5. Claims 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 11-13 would be allowable if claim 11 is rewritten or amended to overcome the objection of the informalities set forth in this Office action.
7. The following is a statement of reasons for the indication of allowable subject matter: the record of prior art does not show an alternator comprising an inner housing, an outer housing mounted over said inner housing, said inner housing and said outer housing defining a sealed flow chamber having a first plenum, an axial jacket, a second plenum, a first passageway interconnecting said first plenum and said axial jacket, a second passageway interconnecting said axial jacket and said second plenum, an inlet

extending from said first plenum, and an outlet extending from said second plenum, said first passageway being defined by an arcuate notch formed within said first disk shaped portion of said inner housing diametrically across from said inlet such that coolant entering said first plenum must flow diametrically across said alternator to reach said first passageway, and said second passageway being defined by an arcuate notch formed within said third disk shaped portion of said inner housing diametrically across from said first passageway such that coolant entering said axial jacket through said first passageway must flow annularly around said alternator to reach said second passageway.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703) 305-3466. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

October 11, 2002

  
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